Remarks

Claims 1-18 are pending in the application. Claims 9 and 10 have been involuntarily withdrawn following a previous restriction requirement. In accordance with the Examiner's helpful suggestion, Claims 11 and 15 have been amended to recite a "beginning" of synchronization, rather than a "top". Claims 1, 13 and 16 have been amended to place them into condition for allowance. Claims 17 and 18 are new. Support for the new claims and the amended elements of Claims 1, 13 and 16 can be found in the specification as detailed near the end of this paper.

Claims 1, 2, 4, 11, 12 and 15 have been rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Pat. No. 6,314,569 to Chernock. Chernock describes a method of displaying a multimedia presentation that includes personalized supplementary audio, video or graphic content. The multimedia presentation ultimately displayed to the viewer includes components from an original video stream transmitted to the viewer's set-top box (STB), and personalized content added by the STB. According to Chernock, the original video stream is transmitted to the STB with defined "holes". The STB includes stored personalized information to be displayed, and incorporates the personalized information into the "holes" to form an image to be displayed. Significantly, the personalized information has been stored on the STB prior to transmission of the original video stream, and is not transmitted therewith. *See*, Chernock, col. 3, ll. 10-13, 22-24.

In response to the previous Official Action (mailed August 1, 2006), the Applicants pointed out that Chernock does not transmit the personalized information to be included in the "holes", but instead utilizes information previously stored in the STB. In sharp contrast, the pending claims describe a system in which the entire interactive program is transmitted in a data stream. *See*, Response filed November 1, 2006. This rejection indicates that Chernock describes the sending of real time information to be inserted into a broadcast video, citing for support the news or sports programs referenced in Chernock at col. 3, line 64 to col. 4, line 3. The text of the cited passage reads as follows:

> The control information may also be added in real time to a live presentation in progress, by specifying video "holes" to the STB. The STB will use this information to display text associated with the program, e.g., news or a sports program, and broadcast along with the video and audio. The choice of text for display can be based on personalization information already stored in the STB.

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According to the cited passage, control information is added to a live presentation. The news or sports program is the live presentation. The control information is broadcast along with the presentation and merely specifies the time in the program and the screen location of the "holes". The information to be displayed in the "holes" comes from "personalization information already stored in the STB". Thus, the Applicants respectfully submit that the passage does not describe the co-transmission of a presentation and the information to be displayed in the "holes". For the reasons set forth in Applicants' Response of November 1, 2006, Chernock does not anticipate the pending claims.

Further, in order to expedite allowance of the application, independent Claim 1 has been amended to emphasize additional features that are not disclosed by Chernock. Chernock provides a technical solution to enable presentation of supplementary audio, video or text objects in superposition of a principal broadcast. These objects are mainly limited to static or animated graphics or audio objects. *See,* col. 2, lines 29-30; col. 6, line 48. Chernock does not disclose an application that is superimposed on the principal video program. The structure of an application, such as that described in this application, is far more complex than the simple audio or video objects added to the principal program in Chernock. In sharp contrast to Chernock, this application describes the transmission of a data structure that provides a complete interactive application. To further emphasize this feature, the preamble of Claim 1 has been amended to recite that the interactive application can be activated by superposition on an animated image background, and that the interactive application is made of elemental components comprising different screens between which the viewer can navigate.

By way of further explanation, the complex interactive application recited in Claim 1 is made of screens composed of draws, associated stimuli and actions, and made of palettes for defining colors in the application. The navigation through the screens of the application is driven by the stimuli and actions associated with each of the screens that make up the application. Claim 1 now affirmatively recites that the screen image descriptions include such draws and associate a series of stimuli and actions to enable the navigation. This structure is not disclosed by Chernock. Similarly, Chernock fails to disclose the claimed step of transmitting the structure.

Chernock is limited to the provision of an image, a graphic text, a video or an audio element. According to the wording of the application, Chernock only discloses a solution to provide a single

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screen, which can be video, image, graphic text or audio. Thus, Chernock is not directed to the transmission of an interactive application comprising a plurality of screens between which navigation is possible. Because Claim 1 affirmatively recites the step of transmitting a data structure that includes, among other things, SCREENS corresponding to screen image descriptions that associate a series of stimuli and actions to enable navigation between screen images, Chernock does not anticipate the claim (or render it obvious).

The amended claim elements defining the screen descriptions also further emphasize the DRAWS components. According to the present application, a screen to be displayed by the STB is a set of elemental DRAWS components. Chernock, on the other hand, only discloses a common bitmap as a picture (or video or audio stream) to be displayed. Thus, the structure of the screens as described in this application and the step of transmitting same, as recited in Claim 1, is not anticipated or obvious in view of Chernock.

As is also recited in Claim 1, the entirety of the interactive application is transmitted in a single structure comprising the description and the contents, i.e., the elemental components. Chernock fails to disclose that the control information (or "holes" information) and the audio, video or bitmap contents are provided to the STB in the same package or data structure. Therefore, Chernock does not anticipate or make obvious the subject matter of Claim 1 for this reason as well.

Further, Claim 1 has been amended to recite the transmission of a data structure in the form of classes grouping the elemental components according to the treatment the elements require. More particularly, the claim recites two distinct affirmative steps relating to the grouped elemental components. The first is the claimed step of grouping the elemental components in different classes according to the required treatment, while the second is transmitting the data structure containing the elements so grouped. Chernock does not suggest any grouping of components in a structure used for data transmission, let alone the method steps of grouping such components and then transmitting the resultant data structure. Therefore, Chernock also does not anticipate these steps of Claim 1.

Another feature described in this application, but not in Chernock, is that the INITIALIZATIONS define the positioning of elements in the data structure used for the transmission of the interactive application. During the construction of the final animated image the INTIALIZATIONS are used to identify and retrieve the DRAWS components of a specific screen to be displayed from within the transmitted data structure. To further emphasize this feature, Claim 1

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has been amended to recite with particularity the process by which the image of grouped elemental components is created after the data structure is received by the digital terminal. Specifically, the claim now recites the affirmative method sub-steps of interpreting the INITIALIZATIONS to determine the position in the data structure of DRAWS belonging to the screen image to be displayed, and displaying those DRAWS.

This method of retrieving components and constructing the image is closely linked to the data structure. Chernock does not describe or suggest such a structure or its equivalent. Lacking any suggestion of a data structure containing INITILIZATIONS and DRAWS, Chernock also fails to suggest the construction of an image by identifying DRAWS based on the INITILIZATIONS, and retrieving same from the data structure. Instead, Chernock, at col 4 lines 17-18, merely suggests positioning of the "hole" on the screen ("screen location"). Thus, the only "structure" according to Chernock is the image or screen with a "hole", while the "structure" defined by the INITIALIZATIONS components according to this application is the data structure used to convey the data of the application on the network to the digital terminal. Therefore, Chernock does not disclose INITIALIZATIONS components that specify positions of other components inside the transmitted data structure, much less the method steps of interpreting such INITIALIZATIONS to determine the position of DRAWS or displaying the DRAWS so identified. For this reason also, Chernock does not anticipate Claim 1 or render it obvious.

The use of the data structure as defined in Claim 1 provides important and unique advantages. The novel structure for the data transmission package, including INITIALIZATIONS, DRAWS, PALETTES and SCREENS, makes it possible to repetitively recompile the data while preparing the interactive application (see para. [0006]). In contrast, Chernock merely states that HTML structure is used, and fails to further specify the structure of the data that is transmitted. In other words, Chernock is concerned merely with the information sent to the STB (*see*, col. 4, lines 10-25), but not the structure thereof. Therefore, Chernock does not disclose the data structure recited in the claim or the steps of transmitting and using it.

For at least all of these reasons, it is respectfully submitted that Chernock does not anticipate Claim 1 or its dependent claims. Withdrawal of the rejection is respectfully submitted.

Dependent Claims 3 and 5-8 have been rejected as allegedly obvious over Chernock in combination with Kamada. Kamada describes a computer graphics device and an editing process

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that allegedly produces a simulation of realistic and lifelike movements. Kamada does not teach or suggest the steps of independent Claim 1 discussed above. Because Kamada fails to remedy the deficiencies of Chernock with respect to the independent claim, dependent Claims 3 and 5-8 are also patentable for at least the same reasons as described above. Moreover, the dependent claims recite additional features that are not taught or suggested by the hypothetical combination.

For example, Claim 5 recites that the elemental components are stored in memory sequentially in their class in order of their use in construction of the animated images. Kamada, at col. 32, lines 23-25 and fig. 38, only suggests storing graphic objects in a tree structure. The cited passage of Kamada does not teach or suggest that the tree is created so as to follow the sequence of use of the objects in an application. Therefore, Kamada does not teach or suggest the storing of elemental components (or objects) in order of their use as recited by Claim 5. Withdrawal of the rejection of Claims 3 and 5-8 is respectfully requested.

Claim 8 has been rejected as allegedly obvious over the combination of Chernock and Kamada, in further view of Fuller. Fuller only concerns the merging of video and/or audio components. Fuller is not directed to an interactive application provided with a TV program. As such, Fuller is inapplicable to the present invention. Further, Fuller is merely cited for the proposition that components can be displayed by an interface in a digital decoder. Because Fuller fails to remedy the deficiencies of Chernock with respect to parent Claim 1, Claim 8 is also patentable for the reasons set forth above.

Claim 13 has been rejected based on the theoretical combination of Chernock and Fuller. In connection with this rejection, Fuller is cited to allegedly show that displayed animation can be an advertisement. Claim 13 has been amended to include many of the elements included in Claim 1. For example, the preamble of Claim 13 now recites that the interactive application is made of elemental components comprising different screens between which a television viewer can navigate, and that the application can be activated by superposition on an animated image background on a digital terminal. Further, Claim 13 also recites affirmative method steps relating to the grouping of the elemental components that are similar to Claim 1, including (1) grouping the components in different classes according to treatment the elemental components require by the digital terminal, and (2) transmitting the components in a data structure that groups said elemental components in the different classes. Also similar to Claim 1, Claim 13 now recites that the screen image descriptions

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list the DRAWS that compose the SCREEN, and that the screen image descriptions associate a series of stimuli and actions to enable navigation between screens. Still further, Claim 13 now recites the sub-steps describing how the image of grouped elemental components is created, discussed above in connection with Claim 1. In particular, Claim 13 has been amended to recite that the image is created by (1) interpreting the INITIALIZATIONS to determine the position in the data structure of DRAWS belonging to the screen image to be displayed, and (2) displaying those DRAWS.

For the reasons set forth above, Chernock fails to teach or suggest any of these features now set forth in Claim 13. Because Fuller fails to remedy the deficiencies of Chernock with respect to these features, Claim 13 is patentable over the combination.

Claim 14 has been rejected as allegedly obvious over the theoretical combination of Chernock and Straub. Straub merely concerns computer systems and networks. Like Fuller, it is not directed to an interactive application on digital TV. Moreover, Straub fails to remedy the deficiencies of Chernock with respect to parent Claim 1. Thus, Claim 14 is also patentable over the combination for the reasons set forth in connection with Claim 1.

Claim 16 has been rejected as allegedly obvious over Chernock and Fuller in further combination with Weinstein. Like Claims 1 and 13, Claim 16 has been amended to emphasize additional features uniquely described in this application, including, in the preamble, that the interactive broadcast can be activated by superposition on an animated image background, and that it is made of elemental components comprising different screens between which the viewer can navigate. Further, the affirmative method step of grouping the elemental components in different classes according to treatment the elemental components require has been added, as has the step of interpreting the INITIALIZATIONS to determine the position of elemental components in the data structure. These and other features of Claim 16 are neither taught nor suggested by the theoretical combination of Chernock, Fuller and Weinstein.

Fuller is cited for the idea that it allegedly would have been obvious to receive elemental components at a digital decoder. The rejection acknowledges that certain steps recited in Claim 16 are not disclosed by the combination of Chernock and Fuller, including: (1) when one of the stimuli associated with the first "SCREEN" is detected, executing an action associated with the stimulus, wherein the possible actions to be executed include navigating to a second or subsequent screen; and

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(2) navigating through a plurality of screens using several previously recited steps. However, the rejection alleges that these steps would have been obvious in view of Weinstein.

Weinstein discloses a method of presenting at the same time a TV program together with interactive information from the Internet. The interactive application is not transmitted together with the TV program. As such, Weinstein also fails to disclose the transmission of a data structure that includes all of the elements necessary to construct an interactive application as claimed. Specifically, Weinstein does not describe the step of grouping elemental components in different classes according to treatment the elemental components require by a digital terminal, or the step of transmitting a data structure comprising the grouped elemental components, where the elemental components include DRAWS, PALETTES, SCREENS and INITIALIZATIONS, as those terms are specifically defined in Claim 16. For the reasons set forth above in connection with Claims 1 and 8, Chernock and Fuller also fail to teach or suggest these features.

Because Weinstein does not include any description of a data structure as set forth in Claim 16, it also cannot (and does not) provide any disclosure or suggestion of the method steps relating to construction of the image to be displayed using the data structure. Particularly, Weinstein fails to describe or suggest the claimed steps of (1) interpreting the INITIALIZATIONS to determine the position of elemental components in the data structure, (2) referencing the positions of the SCREENS, PALETTES, and DRAWS identified in the INITIALIZATIONS, (3) displaying a first screen by reading and displaying the DRAWS comprising the first screen image to be displayed, and referencing the stimuli associated with the first SCREEN, (4) when one of the stimuli associated with the first SCREEN is detected, executing an action associated with the stimulus, wherein the possible actions to be executed include navigating to a second or subsequent screen, and (5) navigating through a plurality of screens using such steps for a second and subsequent SCREENS. For at least these reasons, the theoretical combination of Chernock, Fuller and Weinstein fails to render obvious Claim 16.

<u>Support for New Claim Elements</u>

Support for the new claim elements can be found in the paragraphs of the originally filed specification identified in the format {xxxx} below.

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Claims 1, 13 and 16:

- a digital televised broadcast comprising an interactive application {0020,0026}

- by superposition on an animated image background on a digital terminal {0012}

- said interactive application (or broadcast) being made of elemental components {0026} comprising different screens between which the viewer can navigate {0021,0024}

- grouping said elemental components in different classes according to treatment the elemental components require by said digital terminal, the elemental components within each class requiring common treatment by said digital terminal {0026};

- in a data structure that groups said elemental components in the different classes {0014,0025}

- said screen description listing the "DRAWS" that compose said "SCREEN" and associating a series of stimuli and actions to enable said navigation between screens {0024,0030}; and

- the image of grouped elemental components being created by interpreting the components of "INITIALIZATIONS" to determine the position in the data structure of the components of "DRAWS" (or elemental components) belonging to the screen image to be displayed {0030, 0032} and displaying the "DRAWS" belonging to the screen image to be displayed {0032-0033}.

New Claim 17:

a) transmitting a data structure having elemental components to be stored in memory {0014-0015} and used when needed to construct an animated image {0012}, the elemental components being categorized into classes comprising INITIALIZATIONS, DRAWS, PALETTES and SCREENS **{Original Claim 1}**,

the DRAWS corresponding to graphic representations in the form of codes calling up native functions of the host language of a digital terminal **{Original Claim 1}**,

the PALETTES corresponding to color palettes **{Original Claim 1}**,

at least one of the SCREENS comprising a listing of DRAWS that compose a screen image to be displayed and having a plurality of stimuli and actions assigned thereto **{Original Claims 1, 2}**, and

the INITIALIZATIONS defining positions of the DRAWS, PALETTES and SCREENS in the data structure **{Original Claim 1}**;

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b) receiving the elemental components at a digital decoder {0018};

c) storing in memory the elemental components, including a plurality of DRAWS, each of the plurality of stored DRAWS being able to be called by one or more of a first or subsequently called SCREEN {0014, 0015, 0025, 0026};

d) constructing an animated image {0012} by

i) interpreting the components of INITIALIZATIONS {0032},

ii) determining the positions of the SCREENS, PALETTES, and DRAWS within the data structure based on the interpretation of the INITIALIZATIONS {0032},

iii) identifying the DRAWS comprising the first screen image to be displayed {0030, 0033},

iv) reading the DRAWS comprising the first screen image to be displayed {0033}, whose positions in the data structure were determined in step ii),

v) displaying the DRAWS comprising the first screen image to be displayed {0032-0033},

vi) referencing the stimuli associated with the first screen image to be displayed {0033},

vii) when one of the stimuli associated with the first screen image to be displayed is detected, executing an action associated with the stimulus {0033}, wherein the possible actions to be executed include navigating to a second or subsequent screen {0023, 0034}; and

e) navigating through a plurality of screens using steps d)iii) through d)viii) with a second or subsequent screen image to be displayed {0034}.

New Claim 18:

the step of constructing a second animated image of another screen of said application when a stimulus and corresponding action of the previous screen is detected by said digital terminal to enable the navigation from the previous screen to the another screen {0033,0034}.

Request for Interview

For the reasons set forth above, it is respectfully submitted that Chernock does not disclose, teach or suggest the various features of the independent claims. Further, none of Kamada, Fuller or

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Weinstein remedy the deficiency of Chernock. Reconsideration and withdrawal of the rejections is therefore respectfully requested, and a Notice of Allowance is respectfully solicited.

If the Examiner disagrees with the remarks set forth above, and a Notice of Allowance is not immediately forthcoming, the Applicants hereby request the courtesy of an interview with the Examiner. It is requested that the Examiner contact the Applicants' undersigned representative before the issuance of any new Official Action.

Respectfully submitted,

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